

## ESTIMATING THE UNEMPLOYMENT RATE

Early each month, the Bureau of Labor Statistics (BLS) of the U.S. Department of Labor announces U.S. employment and unemployment estimates. Later in the month, states release their estimates of employment and unemployment. While these figures receive wide coverage in the news media, there is some misunderstanding about what these numbers mean.

In California, as with all states, BLS mandates the procedures used in determining employment and unemployment statistics, (labor force data) for statewide and local area information. Since it is impossible to count every employed and unemployed person each month, BLS relies on information gathered from the monthly U.S. Census Bureau's Current Population Survey (CPS).

Beginning in January 1996, BLS required that California labor force statistics be produced using a "time series model" method. In California, labor force statistics are calculated for Los Angeles County and for the rest of the State. The results from the two areas are added together to calculate the statewide labor force estimates. Within this model there are two additional models: one estimates the CPS employment-to-population ratio and the other the CPS unemployment rate. From that information, employment and unemployment are determined.

The employment-to-population model is the number of people employed in wage and salary jobs from the Current Employment Statistics (CES) survey, divided by the population. This model also includes trend **and** seasonal components to account for CPS movements not captured in the CES series. Seasonal employment factors include the expansion of agricultural employment during spring and summer, while the trend component adjusts for long-term differences in the CPS and CES series (for example, during expansions, the CES historically grows faster than the CPS).

The unemployment model is the number of Unemployment Insurance (UI) claims. The model uses the historical relationship between the UI claims data and the CPS unemployment levels to estimate the current unemployment rates. Seasonal components and flexible trends are other factors included in the unemployment model, and are used to account for movements in the CPS rate not reflected in the UI claims information. The seasonal component reflects, for example, movement or changes in the number of new entrants in the labor force (typically teenagers with no work experience who are unemployed but not eligible to file a UI claim). Flexible

trends are used to adjust for changes in the economy; for example, the change in the relationship between UI claims and the unemployment rate during different stages of an economic cycle.

Once employment and unemployment are calculated, the labor force estimate can be calculated. Labor force is the sum of the employment and unemployment estimates. The unemployment rate is calculated by dividing unemployment by the labor force.

These complex calculations undergo several adjustments. California's monthly employment and unemployment model estimates are adjusted to national monthly labor force estimates from the CPS, which are considered to be more statistically reliable and is referred to as "real-time benchmarking." The prior month's estimates are revised each month to reflect the most current data inputs. At the end of the calendar year, new Census Bureau population controls are introduced and monthly estimates are re-estimated in a process called "annual benchmarking." These numbers and rates are subject to adjustments for an additional two to three years.

### Local Area Unemployment Statistics

Labor Force statistics for all other California counties are estimated based upon several data sources, including the number of UI claims, nonfarm employment data from the CES survey, new entrants and re-entrants to the labor force, and census data. Using the Local Area Unemployment Statistics (LAUS) method prescribed by BLS, the estimates derived for the counties are then aligned to the model findings for Los Angeles County and the balance of California.

The LAUS method is administered and used uniformly throughout the nation and provides a long series of comparable data.

### Seasonal Adjustment

The labor force data for the nation, California, and Los Angeles are seasonally adjusted. Through this process, normal seasonal patterns of employment and unemployment can be removed or minimized. Each year, the national, state, and local economies react to seasonal changes, such as the increase in holiday employment, shifts in industry production schedules, and young people looking for summer jobs. Because of

these changes, it can be difficult to tell if any two months reflect changing economic conditions or merely normal seasonal fluctuations. Most county unemployment, youth unemployment, and minority unemployment rates are not seasonally adjusted because there is insufficient data for the seasonal adjustment process to be accurately completed.

## Definitions

Definitions are also a source of confusion about unemployment estimates. The word “unemployed” is often taken to mean a person who has lost a job, or more dramatically, has been “thrown out of work.” An unemployed person is formally defined as any person age 16 years or older who is not working, but is able to work, available for work, and actively seeking either full-time or part-time work.

The “unemployed” fall into one of four groups: job losers; job leavers (those who quit voluntarily); new entrants (those seeking work for the first time); and re-entrants (those who have previously worked but have been out of the labor force for some time). Job losers usually represent about half of the total job seekers. Re-entrants account for about one quarter of the total. The balance is divided between new entrants and job leavers. This distribution changes with the business cycle. For instance, during a recession, “job losers” generally go higher than 50 percent and “job leavers” drop below 25 percent.

The BLS defines an “employed” person as someone who did any work for pay or profit during the survey week, which includes all part-time or temporary work, as well as regular full-time, year-round employment.

People who are not working and are not able to work, are not available for work, or are not actively seeking work are not counted among the unemployed, but are considered to be “not in the labor force.” Reasons given for not being in the labor force include school or college attendance, poor health, disability, home responsibilities, and discouragement leading to the abandonment of job search activities. The reference period for these labor force statistics is the week including the twelfth of any month.

## Unemployment Rates

Regardless of which method is used, any unemployment rate produced and compared on a month-to-month and year-to-year basis indicates economic changes (especially when adjustments are made to eliminate seasonal influences). A single monthly rate is only useful in comparison to the trend it may reflect over a more extended period of time. The usually reported unemployment rate covers all persons aged 16 years or

older. However, unemployment rates are also determined for certain subgroups. For example, rates can be estimated nationally and in large states for males and females separately. This is also done for youth, minority groups, and specific age groups such as “prime age” workers aged 25-64. These widely varying types of rates comprise the total unemployment rate. However, there is a tremendous diversity of unemployment rates by occupation, industry, and personal circumstances not covered by the published statistics.

## Duration of Unemployment

Another indicator of the employment and unemployment picture is the duration of unemployment. The pool of unemployed workers is constantly changing. New people are entering the labor market for the first time and other people are retiring and leaving the labor market. Some people are leaving the labor market temporarily to return to school or take care of family responsibilities, while others are returning to the labor market, having completed school, or taken care of other responsibilities. The duration of unemployment represents the length of time persons classified as unemployed have been continuously looking for work. Depending on economic conditions and the demand for particular skills, new jobs are usually found fairly quickly.

## Use of the Unemployment Rate

The unemployment rate is important and has many uses; it is a major factor in following economic conditions and a means of determining the distribution of federal dollars at the local level. However, the unemployment rate is an estimate for the total working-age population, and, as such, does not apply to any specific individual looking for a specific job.

*If you have any questions on unemployment rate estimates, or would like to obtain labor market information, please write or call:*

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(Select: “Labor Market Information”)*

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